

## **ABSTRACT**

The present invention provides a porous bioceramics for bone scaffold.

The porous bioceramics according to the present invention comprises a biocompatible porous ceramic substrate having the property to thermal-decompose hydroxyapatite in contact with it; a fluorapatite (FA) inner layer formed on said porous ceramic substrate; and a hydroxyapatite (HA) outer layer formed on said fluorapatite inner layer. The insertion of FA intermediate layer can prevent the thermal reaction between  $ZrO_2$  and HA. Therefore, the present invention can provide the implant material into human body having excellent mechanical properties of zirconia as well as the biocompatibility, bioaffinity and bioactivity of HA. The present invention can also provide the implant material to promote osteoconduction and osteointegration in human body.